Det. Bel. Isle & Windsor Ferry Co 68

DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

VOL. XI. NO. 21. CLEVELAND, O., MAY 9 1889. $2.00 PER ANNUM [SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND, OHIO.

John Smith, of the Globe shipyard, made at visit to Port Huron and Sarnia, to look after his fences.

The Pontiac, at the yard of the Cleveland shipbuilding company, has her plating pretty much all on.

The new steamer North Star, on her maiden trip this week, made the distance between Cleveland and Detroit in just nine hours.

The steamer Cayuga will be ready for service about the 15th inst The other Lehigh boat, the Seneca, will be launched in about two weeks.

Mr. G C. Barnes is in Ashtabula Harbor on business for the Chase machine company, of which he is a member. This firm is doing a rushing business in the Chase fog whistle machine and general machinery.

We are pained to learn that Frank Wright is confined to his home and bed by a slight attack of peritonitis, and a low type of malaria, occasioned, no doubt, by his close attention to his duties around the dock where there is so much stagnant water.

At the Cleveland company's dry dock, the schooner Guiding Star had butts calked; the tugs Florence and Dreadnaught had butts calked, and the tug Allie May some calking and a new wheel; the schooner H. A. Kent butts calked, the Owasco taking her place for necessary repairs.

The Globe iron works company has the two boilers finished for Captain Thomas Wilson's new steamer building at Quayles' Son's shipyard, and is working night and day on the engines. The same firm has the engines and boilers ready for Captain Johnsons' steamer under construction at the Cleveland dry dock company's yard. Two sulphite boilers for the paper mills at Dexter, N. Y., will be launched this week from the Globe boiler shop. Two more of these monsters are still in Mr. Hambletno's hands.

The new steamer Frontenac, recently launched at the yard of the Cleveland shipbuilding company, went out on her maiden trip on Saturday at 9-15 p. m., and arrived a D troit at 8 a. m Sunday. Her machinery worked well, turning up 84 per minute, on 145 pounds of steam. She has the Providence steam windlass and capstans, and Williamson Bros' steam steerer. The extra crew consisted of Messrs. W. G. Mather, Robert and James Wallace, T. W. Bristow, O N. Steele

The trial trip of the Neshoto, recently launched at Quayle's Son s shipyard, took place yesterday afternoon, being out about one and one-half hours. Quite a pleasant party of invited guests were aboard R. R. Rhodes, who cannot be surpassed in providing entertainment, appeared well pleased with every phase of the event, and Captain Humphrey says he has the finest fitted and furnished boat on the lakes. The woodwork and brasses, railing, etc., are about as fine and well polished as they well could be.

MILWAUKEE, WIS.

David Vance & Co. have been notified by the Vermont Central line of the latter's intention to libel the steamer Roswell P. Flower in the sum of $15,000 upon her arrival at Buffalo, pending the decision of a suit on a claim for $5,000, which is to be tried at Syracuse, N. Y., as soon as the case can be reached. It will be remembered that late last fall the steamer Flower lost her rudder on Lake Huron and was towed to Port Huron, a distance of seventy-five miles by one of the Vermont Central steamers. For this service a claim of $3,000 was presented. Deeming the charge exorbitant, the Milwaukee steamship company declined to pay, but rather than have any litigation made an offer of $2,000 in settlement. This offer was promptly rejected by the Vermont Central line. It was then agreed to have the matter litigated on an increase of their claim by the Vermont Central people to $5,000, the understanding being that libel proceeding should be waived. Now, however they step in and libel for $15,000, but are honorable enough to give notice so that a bond can be promptly furnished.

DETROIT, MICH.

Special to the Marine Record.

The new steamer Thomas W. Palmer, will leave here on her maiden trip, Saturday, for Escanaba.

Louis Lemon's tug Quickstep, is engaged in the dredging operations now going on in the river. The C. D. McKinnon and the Oneida of the same line are doing general river towing.

The M. D. Carrington, of the Ruelle tug line, has taken the machinery for the new boat building at W. B. Morley's yard, Marine City, to the order of Captain James Corrigan and others of Cleveland. Captain Ruelle has also under charter the tug Sprite, spoken of in last week's notes.

Captain George Simpson, compass adjuster, is in the city, and choke full of work, adjusting various sea clocks.

The local inspectors. Hugh Coyne and Thomas Daly, inspected the tug C. C. Mc Donald on Tuesday afternoon. The McDonald was found up to the standard and will receive her papers for the season.

Samuel F. Hodge & Co., Riverside iron works, are kept very busy. The tug Shaugraun is at their dock having her cylinder bored out. The propeller Joseph P. Farnan for new connecting rod brasses, and several large new steamers have had repairs to air pump guards.

The new steambarge Lily, belonging to A. H. and J. N. Tucker, passed down on her first trip Sunday. The Lily was built in Mt. Clemens for the coal and lumber trade between that city and Sandusky, O.

The Eagle iron works are keept busy finishing recent orders, and their extensive plant is running full time.

Thomas Murphy has sold the tug Gladiator to Port Huron people. Consideration $13,000.

Thomas Love, West Detroit boiler works, is making an upright boiler for the Coller steam yacht works. Dimensions 48 inches by 5½ feet. He is also busy on several smaller orders.

Thomas McGregor, Central boiler works, left here Tuesday for Bay City, and we would not be surprised to hear of new work being contracted for as one result of the visit. The works are now busy finishing up former orders, and making a tubular boiler for the Globe tobacco works. Dimensions 6 feet by 18 feet; also making a smokestack for the S. J. Macey, and a quantity of light sheet iron work to fill local orders.

A delegation from the Cleveland vessel owners' association spent Tuesday in the city They gave evidence before the bridge commission.

Mr. Walton, of the firm of Upson, Walton & Co., was in the city Tuesday.

Captains George P. McKay, Stone, Thompson and Benham left here for Cleveland Tuesday night.

At Springwell's dry dock, repairs are being made on the steambarge Cleveland. She will be calked and have stern bearings overhauled, etc; steambarge Ira Chaffee for minor repairs; steambarge Schuykili docked for calking and general repairs and a thorough overhauling The excursion steamer Pearl, is being got ready for the season's business.

The new steamer City of Detroit, tested her machinery Tuesday, and it was generally remarked on the river front that no vessel had ever toted her keel along at so lively a gait on fresh water. The verdict is that she must be a daisy.

Lieutenant W. H. Roberts is appointed to the Fessenden, vice Lieutenant R. M. Clark, detailed for duty in the life saving service.

James E. Haggerty of the Riverside iron works, has just returned from Grand Haven, where he went to fit out the steam yacht J. C. Ford of the Grand Haven owl club.

The steamer City of Mackinac will be taken off the Lake Erie division, and placed on her regular route petween Detroit and Mackinac.

It has been reported that Mr. Murphy contradicts the sale of his tug Gladiator.

Captain Steve B. Grummond is convalescent, and attending to business as usual.

Before the bridge commission, Captain Pridgeon considered the bridge with a thousand feet opening. He said it would be no serious obstruction to navigation. A communication was submitted from the Milwaukee bridge works offering to construct a bridge 150 feet high with five spans of 500 feet each, or twenty of 500, two of 400 and one of 725 feet with four piers at a cost of $3 350,000, or half of Lindenthal's figures. Captains Chris Moore, George McKay, J. C. Thompson and C. E. Benham opposed the winter bridge. Mr. Goulder presented a remonstrance against a winter bridge, signed by 300 captains and owners representing property valued at $15,000,000.

The steamer Alaska, of the Detroit, Put-in-Bay & Sandusky Line, was partially destroyed by fire at her dock in this city at 9 o'clock Tuesday night. Loss estimated at $8,000. If her machinery is damaged the loss will be much greater. The steamer had just arrived and unloaded her passengers. Her officers and crew escaped uninjured. The Alaska is 361 tons. She was built in 1878, owned by J. P. Clark, valued at $30,000 and classed A2

The A. P. Wright struck at Grosse Point Sunday night. She was leaking some, but her deck pumps kept her free. The Ida Keith also is leaking in consequence of striking at the St. Clair canal. Her pumps kept her free.

The Detroit river tug lines are now running wild, and prices have been cut considerable, half rates being paid in some instances. Tug owners are getting sore over this state of affairs, and there is talk again of an association being formed, though on somewhat different lines to the proposed spring combination, which insisted that boats should be repaired, etc., after the season's work at the expense of the pool. The better class of boats, which would probably need no outlay in the fall, did not feel like working to repair others, and the arrangement fell through.

The Detroit dry dock company brought suit in the United States circuit court some time ago, against F. W. Wheeler, shipbuilder, of West Bay City, Mich., for an infringement on a patent iron or steel deck stringer and sheer strake, the invention of Frank E. Kirby, consulting engineer of the company. Mr. Wheeler recently made arrangements whereby the suit will be discontinued. It is understood that he agreed to pay a satisfactory royalty to the company.

The fourth attempt to sell the Morley fleet, consisting of the steambarge R. C. Brittian, and barges Reindeer and Colorado, was successful, and after a vast amount of wriggling they were finally knocked down to Mr. Peters of Toledo for $8,610.

Gen. Poe gives notice that for the present and until further notice vessels drawing more than 14½ feet of water will not be permitted passage through St. Mary's Falls canal.

The propeller Verinica, coal laden, stranded on Lighthouse point Sunday night; she was released this morning by the Leviathian, uninjured.

Mr. J. T. Matthews, vessel owner, Toronto, is in the city spending a few days with relatives.

The new Detroit and Cleveland steamer, City of Detroit, had a short trial trip on Monday. A special excursion party for owners, including the McMillan family, Tuesday, and a whirl on Wednesday afternoon, given in honor of the city, the guests being largely composed of city officials and prominent residents. This morning at 9 o'clock she starts on her maiden trip to Cleveland with a distinguished list of passengers.

At the Detroit drydock company's yards the steambarge E. B. Hale is docked for repairs to stern bearings, calking all over, some new outside planking and a general overhauling; steambarge R. C. Brittain repairs to stern bearings and new shaft, bottom and decks calked and minor repairs. She is being painted inside and out. The river tug Castle will dock today to have bottom overhauled, and she will receive a new shoe and rudder. The new steamer building for Captain Humphrey and others, of this city, is getting well along, being nearly all planked on the bottom; her boiler is alongside and will be put aboard at once. The new boat building for the Central Vermont line has about seventy frames up. She has extra floor timbers and will be a very strong boat, specially adapted for the Welland canal. The new boat, numbered 94, by the builders, and being built to the order of Messrs. Eddy Brothers and Captain Shaw, is having her main deck calked, main rail bolted on, and an Eagle iron works hoisting engine placed on the main deck. She is a splendid, staunch, well built steamer; in fact, Captain McLeod, inspector Lloyds' inland marine, says that she is one fo the finest built vessel in course of construction on the chain of lakes. She is fitted with a Providence windlass, manufactured by the American ship windlass company, Providence, R. I., has nine hatchways, and will have three masts. She is now being painted outside.

East end boiler works are doing repair work on machinery for the Banner tobacco works, repairs at the Detroit water works, and have just finished a smoke stack for the tug Ballentyne laying here. They have also received an order for one of the new steamers building at Wyandotte.

F. W. Wheeler, shipbuilder, Bay City, is in the city today.

John Oades & Son are giving the schooner Spalding two new lower masts and new fore and main booms, yacht Jennie J. all new outside planking, and fitting up the new steamer in course of construction. She is ready for outside planking and she has been well varnished inside. SWAIN.

CHICAGO, ILL.

Special to the Marine Record.

A. A. Bigelow & Co's. fine fleet arrived here for the first time this season with lumber from Washburn, Lake Superior, last Friday evening. They left Washburn Saturday, April 27, and encountered heavy gales and snow storms on the 28th and 29th; the fleet comprise the steambarge Robert Holland, Captain J. S. Colbeck, Chief Engineer Thomas Corrigan, with 350,000 feet of lumber; barge S. M. Stephenson, Captain George Granger, with 768,000 feet of lumber; barge Sherwood, Captain Martin Moore, with 737,000 feet of lumber; barge Fanny Neil, Captain C. K. Moore, with 575,000 feet of lumber.

A splendid oil painting of the V. O. T. company's tug Protection with the fine schooner J. B. Wilbur under full canvas in tow, also a tug and vessels in the distance, has baen painted by Wm. McKittrick, chief engineer of the steamship Wm. H. Barnum, for E. J. Lynn. The painting is very realistic and natural, and any one would take it as having been done by an old master painter, instead of an ameteur. McKittrick must have been born an artist or he could never have executed such a splendid work of art.

Saturday morning the schooner Alva Bradley in tow of a tug collided with the Saint Paul railroad bridge up the north branch of the river. The Bradley's jibboom and fore topmast were carried away, and considerable damage was done to the bridge.

Captain John Coulter, aged 51 years, died at his residence 1013 West Adams street, Chicago, Saturday May 4th, at 6 p. m. He was stricken down by an attack of paralysis when in commond of the steamer Cumberland eight years ago, and suffered from it to the time of his decease. He formerly sailed the schooner Camden and barque J. C. Woodruff and others, and was well known and highly respected by all. He leaves a widow, one daughter, and three sons to mourn the loss of a good, kind husband and father. The Covenant lodge of Masons, of which he was a member, conducted his funeral, which took place at Rose Hill cemetery Tuesday afternoon. Many old brothers and friends followed him to his last resting place.

Captain John Anderson resigned the office of assistant harbor master, which was very efficiently held by him, on Monday morning. He intends going into the real estate business

The steamship Nebraska, Captain Tom Burton, which arrived here for the first time this season last Thursday, with coal from Buffalo, looks greatly improved by her rebuild at the Union drydock company's shipyard last winter. She loaded 107,000 bushels of oats on 15 feet of water, and left Monday afternoon for Buffalo.

The steamship Robert Mills, Captain Alexander Clark, made her first appearance here this season on Saturday, light, from Milwaukee, where she had carried 1,834 tons of coal. She loaded 120,000 bushels of oats and left here Monday evening for Buffalo.

The steambarge J. P. Donaldson, Captain C. H. Marsden, and consorts Brightie, Goshawk and Donaldson put in their first appearance here this season with 2,375,000 feet of lumber, Saturday morning from Oscoda.

The steambarge Ogemaw, Captain Thomas Coran, and consorts City of the Straits, Tilden and Maxwell arrived here Monday morning, the first time this season, with 2,300,000 feet of lumber from Oscoda.

The steambarge H. S. Pickands, Captain George L. Cottrell, with 600,000 feet of lumber, and consort D. P. Dobbins with 700,000 feet of lumber from Au Sauble, arrived here Monday, their first time this season. The Pickands has, during the winter, had her engine compounded by S. Hodge & Co., Detroit; also received a new steel boiler 11 by 15 feet, built by John McGregor, Detroit, which has been placed on deck, and an entire new cabin aft. The Dobbins received a rebuild by Dunford & Alverson, Port Huron, which has made her one of the best tow barges on the lakes.

The Josephine three weeks ago ran into the old schooner Cascade in the north branch. To-day the owners healed up the gap in the schooner's side with a check for $1,000. The old hull will be made a light-ship at $300 per month.

On Monday, May 6th, before Judge Grinnell, in the case of Sheridan vs. the schooner C. A. King in an action for damages for $10,000 for injury sustained by plaintiff while sending down the truss, the mate being aloft made an insecure hitch, the truss fell and struck the plaintiff on the head. The plaintiff's attorneys seeing the case was going against them, the judge ruling the mate and seamen as being co-employes, asked leave to file a new declaration, which was granted. Foster and English for plaintiff, Schuyler and Kraemer for defendants.

Vesselmen never acquiesced in the authority of the city harbormaster to tie up their boats if loaded to a depth of water which assured them going aground in the bridges. When harbormaster McCauly insisted upon that course last fall and early again this season there was a general protest from vessel owners, and one agent threatened to sue the Harbormaster for the time he lost by the order. "Jack" McCarthy, Cregier's new harbormaster, takes the same position that McCauley did. He said he undoubtedly had the right to tie up vessels drawing more water than there was in the river, and he should exercise it when he felt certain these boats would go aground in the bridges.

The new steambarge John E. Hall built by A. Scove, shipbuilder, Manitowoc for Samuel Hall, and commanded by Captain Sniffen left Manitowoc, April 8, on her first trip with ties for Chicago, since which she has made two round trips to Georgian Bay with grain and arrived May 5th at South Chicago with lumber. This is unprecedented in the history of lake navigation, no steamer having ever made two round trips between this port and Georgian Bay so early in the season.

Mr. H. J. Deal, western passenger agent, and Mr. E. P. Howell, city agent of the Detroit and Cleveland steam navigaton company, of Detroit, are stopping at the Brevoort. They are arranging for the initial trip of the old steamer City of Detroit, of their line, which will make daily trips between Chicago and Benton Harbor, during the summer.

The Union line steamship Owego proved herself the greyhound of the lakes by her great run up from Buffalo on her last trip. The record of sixty hours and fifteen minutes from Buffalo, made by this same steamer last year, was broken. By the boat's chronometer fifty-eight hours had elapsed since passing the piers at Buffalo, and this must be set down as the record. It was from Mackinac to Chicago that the greatest run was made. The 384 miles had been covered in nineteen hours and forty-five minutes She had on less than 1,000 tons of pacdage freight, and drew six feet forward and fourteen and one-half feet aft.

[CONTINUED ON PAGE 4.]

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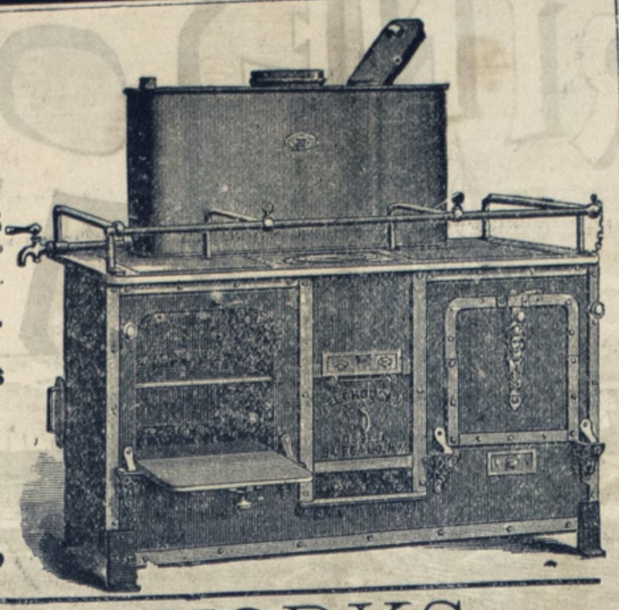

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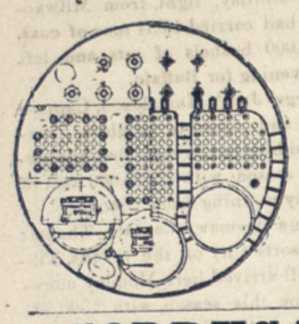

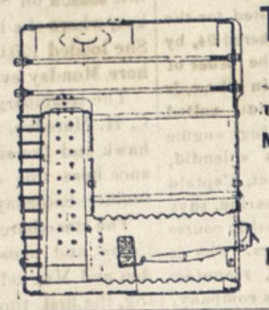

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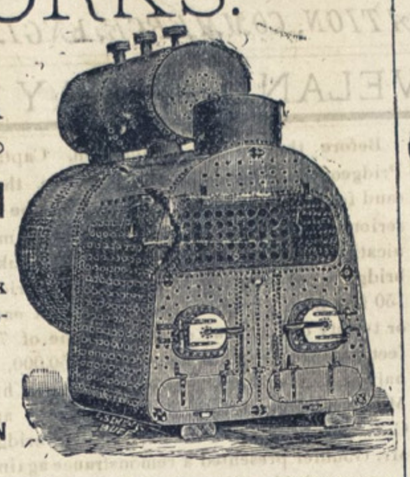

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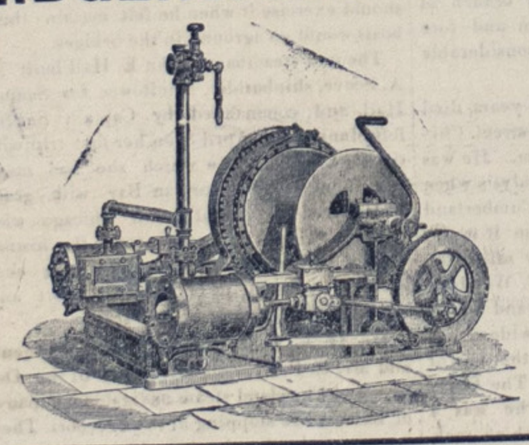

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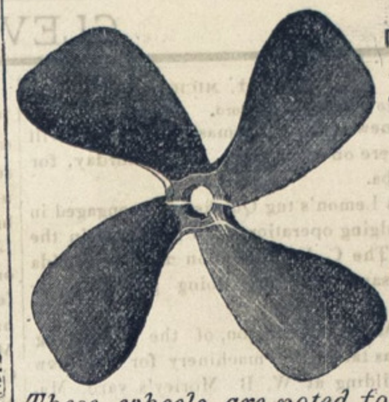

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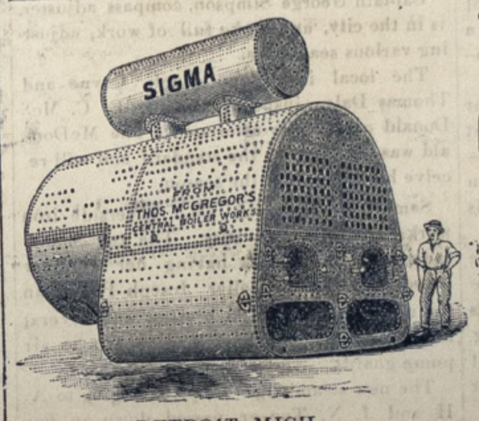

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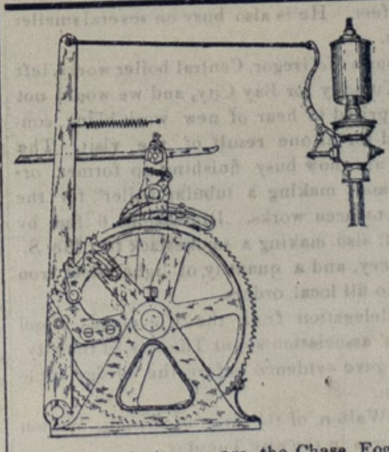

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Chase Fog Whistle Machine

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To the President and Board of Supervising Inspectors of Steam Vessels:

Your committee to which was referred the "Chase Fog Whistle Machine" beg leave to report: "That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and we recommend it or similar device to owners of steam is as an additional safeguard to navigation.

H. S. LUBBOCK,
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W. D. ROBINSON, } Committee.

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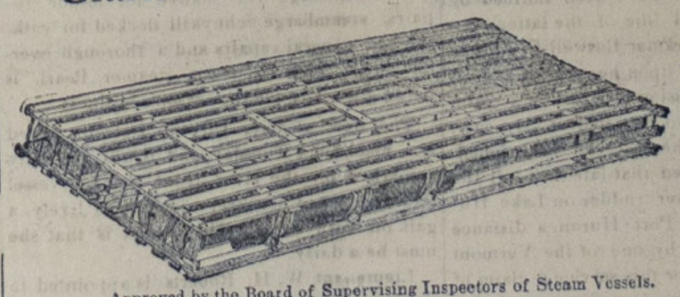

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6	4 x 6	40
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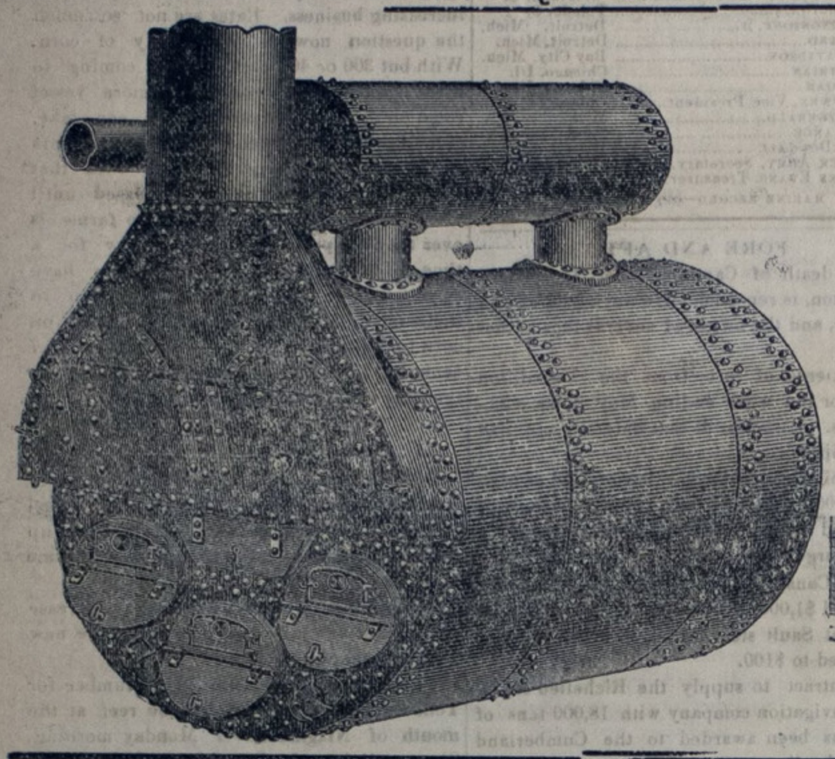

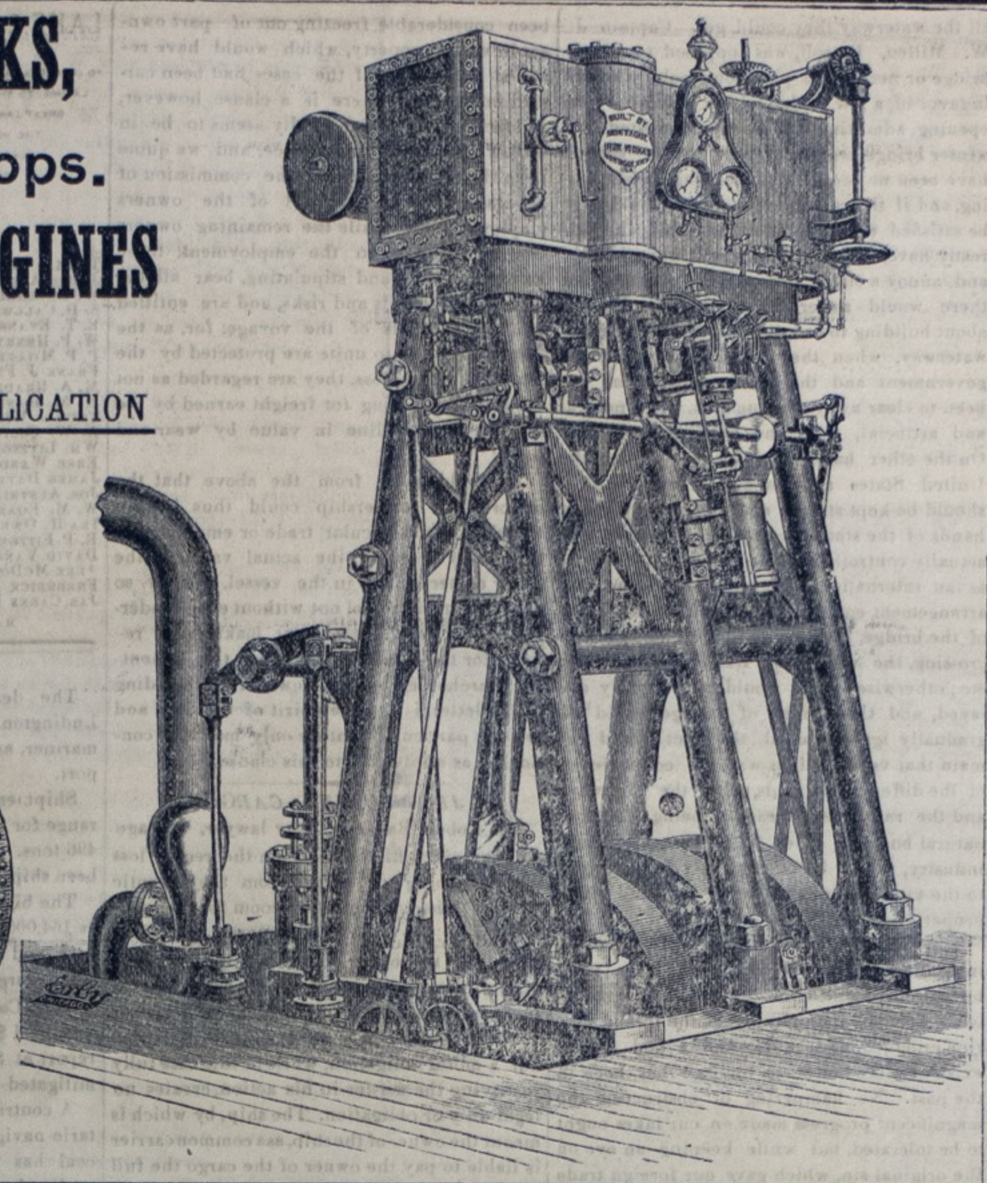

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No. 68, New York Express	†10 50 p m
No. 68, Pittsburg Express	†10 50 p m
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No. 67, Pittsburg Express	*10 55 a m
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PROPOSALS FOR STEAM BARGE.—U. S. Engineer Office, Buffalo, N. Y., May 1, 1889. Sealed proposals in triplicate will be received at this office until 12 M., eastern standard time, June 3, 1889, for chartering a steam barge to the United States to be used at Erie harbor, Pa. Attention is invited to the acts of congress approved February 26, 1885 and February 23, 1887, Vol. 23 page 332 and Vol. 24 page 414, statutes at large. Specifications, blank forms of proposals and all necessary information can be had from M. J. C. QUINTUS, Erie, Pa., or from the undersigned.
F. A. MAHAN, Captain of Engineers.

PROPOSALS FOR TUG AND SCOW.—U. S. Engineer Office, Buffalo, N. Y., May 1, 1889. Sealed proposals in triplicate will be received at this office until 12 M., eastern standard time, June 3, 1889, for chartering to the United States for use at Erie harbor, Pa., a tug, scow and dump scows. Attention is invited to the acts of congress approved February 26, 1885, and February 23, 1887, Vol. 23 page 332, and Vol. 24 page 414, statutes at large. Specifications, blank forms of proposals and all necessary information can be had from Mr. J. C. QUINTUS, Erie, Pa., or from the undersigned.
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STOCKLESS ANCHORS.

Within the last few years the material and form of ships' anchors have been the subject of much discussion. The use of cast steel as an alternative to wrought iron was considered by a committee appointed by the board of trade in 1887, and their report recommending a series of special tests for the new material may be considered to have settled that part of the question. It remains a mooted point whether the anchor of the old and familiar type, that is, with flukes in one plane with the shank and with a stock at right angles to them, is on the whole superior to the stockless anchor of which many varieties have appeared within the last few years.

The anchor of the early part of the present century was of practically the same design as that which has been in use from the earliest times. The shank was long and thin and the arms nearly straight, and the metal used in the manufacture was of very inferior quality. The pioneer of improvement in anchor design and manufacture was a clerk in Portsmouth dockyard, named Pering, who worked at the question for over twenty years, and had the satisfaction ultimately of effecting great improvement in the mode of manufacture, the quality of the metal and the shape and proportions of the anchor. Pering's anchors and the anchor known as the Admiralty anchor, which succeeded them, however they might differ in proportions, were in general design still the same as the ancient type, that is, the shank and arms were in one forging, and the stock was made of wood.

In 1846, however, an anchor was brought out, which was of quite a distinct character. This was known first as Porter's anchor, but it subsequently passed into other hands, was somewhat improved in form, and was ultimately known as Trotman's anchor. In Trotman's anchor the crown and arms were in one piece, and the shank in another, and the crown was constructed to move upon a pin or bolt in such a way that when one arm is in the ground the other is pressing hard against the shank. The peculiar construction of Trotman's anchor rendered necessary a fish tackle or loop; and although the original Porter's patent had a wooden stock, about 1850 iron began to take the place of wood for this part; and in later specimens of Trotman's anchor the stock was always iron. It was thus the case that this became the common form for a spare anchor; being divided into three parts, each of manageable shape and size, it could be stowed away and readily put together in the event of accident to the working anchor.

While Trotman's was a decided departure, as regards form and construction, from the old type of anchor, its use did not involve any new principle. As in the old type it depended for holding power upon one arm at the time, and was prevented from canting by a stock at right angles to the plane in which were the shank and flukes. Previously to its appearance, however, there had been in the market a stockless anchor constructed with a view to both flukes holding at the same time; in fact, in most respects essentially the same as the modern stockless anchor. This was known as Hawkins' anchor, and its patentee described its advantages as follows: "The anchor is so constructed that both the flukes (which act on a revolving principle) penetrate into the ground at the same time. The consequences are: first, that it holds nearly equal to two anchors; second, that it will not foul or cut, chafe or injure the cable; third, that it does not require a stock; fourth, that it breaks ground much easier, and is more conveniently worked, does not impede the way of the vessel in being hove up, will stow without any projection, can never injure the bows in weighing, catting, or fishing, and is particularly well adapted for kedging; fifth, that in the event of the ship grounding upon her anchor her bottom cannot be injured, which is often the case with the common anchor."

As a matter of fact, Hawkins' anchor proved a practical failure, it was not much taken up at first, and soon was altogether abandoned. The next most remarkable thing in the way of anchor-making, was an attempt to secure the advantages of double hold, that is, two flukes in use at the same time, in an anchor with a stock. Martin's anchor, patented in 1854, is so constructed that when stowed on board ship the flukes, shank, and stock are all in one plane, but when in use the flukes are at an angle of about 30 degrees to the stock. If, therefore, one fluke is not in as good holding ground as the other, the anchor cannot trip very far before it is brought up by the stock.

Martin's anchor has been largely used by the admiralty in war ships on account of the advantages it possesses of stowing on board the ship in one plane. In case of vessels where it is desirable to secure a good range of fire over the deck, a recess has been made in the deck near the ship's side, and a Martin's anchor can be housed snugly, and so as not to interfere with the line of fire.

In considering modern developments of the anchor, as regards form and use, we have then three leading types:

1. The anchor with two flukes, but only one in the ground at the time, and with the stock at right angles to the flukes

2. The Martin type, with both flukes in the ground at the same time, and the stock standing in the same direction to the shank with the flukes.

3. The stockless anchor having the two flukes in the ground at the same time.

For the recent history of anchor development, we have been much indebted to an able paper appearing in last year's "Transaction of the North-East Coast Institution of Engineers and Shipbuilders," from the pen of Mr. G. W. Sivewright, M. I. N. A., of Messrs. Withy, West Hartlepool. Mr. Sivewright is well known on the north-east coast for his readiness to take up any new idea and for the energy and skill he

[CONTINUED ON PAGE 7.]

Marine Record.

Published Every Thursday at 181 Detroi Street, Cleveland, Ohio.

A. A. POMEROY, EDITOR AND PUB

BRANCH OFFICE:
252 South Water Street, Chicago, Illinois,
THOMAS WILLIAMS, Associate Editor.

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MARINE RECORD—OFFICIAL PAPER.

The Cleveland Vessel Owners' association is prepared to receive applications for admission for 1889, on same terms as last year, viz.: 3 cents per ton on steamers, and 4 cents on sail and consort; old custom house register. The time during which tonnage may be admitted expires May 15th, but it is desirable that all crafts intending to come in should apply before the opening of navigation, and have the benefits of the entire season. Address,

B. L. PENNINGTON, Sec'y,
112 Water St., Cleveland, Ohio.

DETROIT RIVER BRIDGE.

The interesting discussion, held in Detroit this week relative to the Detriot river bridge, will certainly tend to ventilate the question more fully than ever it has been before. Judging from the mass of evidence presented to the commission, we have no hesitation in saying that the bridge scheme is already doomed, and we may add, justly so too. The arguments put forward by the supporters of the bridge and other interested persons are in some cases flimsy and superficial as, for instance, Mr. W. K. Muir, who voted a tunnel impracticable because the rock in the river was porous and full of fissures, adding that the river bottom was full of boulders, reasons which have not the slightest grounds or bearing on the practicability of the construction of a tunnel. George H. Ely, representing the iron ore association, briefly outlined the immensity of the iron ore interests, and it is well known that this industry has no parallel in the world. The fact was also very ably put, that if it was not for the facilities of water carriage the iron ore, coal, lumber, grain, etc, could not be transported only at a greatly increased cost to the consumers in the northwest, many of whom are not blessed with too great an abundance of the filthy lucre. H. B. Ledyard, president of the Michigan Central railroad, spoke of the steady increase of lumber shipments by rail, and the uncertainty of the cost of a tunnel in support of the bridge theory, which statement was entirely set aside by Mr. Livingstone quoting the full particulars of the running of the railway tunnel from the foot of Brush street, and showed that if the builders had not been called off the tunnel might have been successfully completed. Captain W. B. Guyles, Cleveland, said that the proposed bridge would be a most decided obstruction, and that vessels required all the waterway they could get. Captain J W. Millen, Detroit, was opposed to a high bridge or permanent piers, but spoke strongly in favor of a low bridge with a thousand feet opening, admitting that he was interested in a winter bridge project. There really should have been no occasion for calling this meeting, and if the railroad monopolies could only be satisfied with the enormous hold they already have, without trying to hamper, harass, and annoy a sister industry, the marine, then there would never be another word heard about building towers to obstruct a navigable waterway, when the best endeavors of the government and the mercantile marine has been to clear away obstructions, both natural and artificial, from the path of commerce. On the other hand, if a bridge joining the United States and Canada is ever built, it should be kept strictly and exclusively in the hands of the state government, or better still actually controlled by the federal government as an international highway, and a mutual arrangement entered into regarding the rules of the bridge, in so far as the rate of speed in crossing, the weight of trains, and signals, etc., otherwise vessels would be seriously delayed, and their right of passage would be gradually ignored, until the fact would remain that vessels might wait the convenience of the different railroads using the highway; and the railroads, instead of being the most natural business allies to the water carriage industry, would become grossly antagonistic to the vital interests of vessel men and their property.

The millions of capital already invested in floating property on the great lakes must have due recognition at the hands of our legislators, or the nation may see the inland marine crucified, as it were, and wiped out of existence like our ocean tonnage has been in the past. No hampering or obstructing the magnificent progress made on our lakes ought to be tolerated, but while keeping an eye on the original sin, which gave our foreign trade over into the hands of the British, every facility, encouragement, and convenience that the nation can consistently offer should be tendered to the backbone of the United States merchant marine as represented by the lake commerce.

Vessel interests had need to be represented at the commissioners' meeting, otherwise the specious arguments of those interested in the large monopolies in favor of bridging the river, might possibly have warped the better judgment of the gentlemen appointed to weigh the questions and interests involved. Water transportation is, and always has been an unmixed good, and competition equalizes rates of freight and passage, besides securing the best accommodation possible, but such could not be always said of the railroad lines, and it is needless to say that the object of the promoters of the bridge scheme is neither philanthropic or patriotic; however, we hope to chronicle in the near future the entire collapse of the scheme to obstruct by artificial means the already arduous navigation of the Detroit river.

We are positive in asserting that the advocacy of the so-called winter bridge would only be the initial step towards a permanent bridge, and the franchise once gained bridges would be thrown across the river at Port Huron and other points on the Detroit and St Clair rivers. Effects detrimental to sailing craft are already felt by the building of the small bridge between Belle Isle and Detroit one vessel having been recently dismasted, while the pillars built in the river to support the spans causes a stronger current there than was ever experienced at ordinary times before. Not only are masters and owners directly opposed to artificial obstruction in the form of a bridge, but experienced marine engineers with whom we have conversed join unanimously in considering the whole project as being entirely uncalled for and detrimental to the best interests of the whole lake community, including the vast amount of tonnage owned by the railroad corporations. The merits of the whole question, however, will be decided by the commission very soon, and we trust for the best.

PART OWNERSHIP.

Judge Brown entered an order in his court at Detroit last Thursday, denying a motion to bond the steambarge Benton, and ordering a sale of the boat in ten days. The question of bonding arose out of a dispute between the owners regarding the master to be appointed to take charge of the boat. Carlton Graves as part owner claimed to be entitled to take command. Mr. Vance, another owner, objected, hence the suit. We are pleased to see that Judge Brown's ruling in this case is in accordance with an article published recently in the columns of this paper, and since a vast amount of misconception is generally entertained on this important subject, we reproduce a portion of the item referred to.

"According to the maritime law of the continent of Europe, if the owners of a ship disagree among themselves as to her employment, a court of admiralty will, upon application of the parties, decree a sale of the ship for the benefit of all owners. A similar rule has been followed in the courts of admiralty in the United States. A court will not compel one owner to buy out another's interest. He may sell the whole ship and divide the interests of the different owners. There has been considerable freezing out of part owners in vessel property, which would have resulted differently if the cases had been carried into court. There is a clause, however, in maritime law which hardly seems to be in accord with equity and justice, and we quote from the annual report of the commission of navigation: "Where a part of the owners employ the ship, while the remaining owners decline to unite in the employment, those employing her and stipulating, bear all the expenses of outfits and risks, and are entitled to all the profits of the voyage; for, as the owners refusing to unite are protected by the stipulation from loss, they are regarded as not entitled to anything for freight earned by the ship or her decline in value by wear and tear."

It would seem from the above that the majority of ownership could thus keep a vessel in any particular trade or employment, simply by insuring the actual value of the lesser owner's share in the vessel, and by so doing wear the vessel out without ever rendering an account current, or making any returns for the capital invested by the dissenting shareholder. Such, however, if according to the letter, is not the spirit of the law, and the one particular venture only may be considered as applicable to this clause.

JETTISONING CARGO.

Mr. Robert Rae, admiralty lawyer, Chicago Ill., has given his opinion on the recent loss by jettisoning of cargo from the Atlantic steamer Missouri, to make room for the passengers of the ill-fated Danmark. Mr. Rae says that no claim arises for insurance by general average, or otherwise by reason of the jettisoning, and further states that the master of the Missouri had a social duty to perfo m, but a moral obligation, while in this case fully justifying the master in his action, creates no legal duty or obligation. The ship, by which is meant the owner of the ship, as a common carrier is liable to pay the owner of the cargo the full value of the sacrificed property, sacrificed not for the purpose of relieving the ship or cargo from a common sea peril, but for the purpose of saving human life. The Missouri is therefore legally responsible. In the connection we would call the attention of our readers to the simple difference between particular and general average, shorn of all legal or nautical technicalities. General average consists of a voluntary act, such as cutting away masts to save hull and cargo, or jettisoning a portion of cargo to save the bulk, or any other act where a part is voluntarily sacrificed to save the bulk. Particular average is covered by the phrase "act of God", such as an accident whereby a vessel loses her masts, boats, or other apparrel in a squall, or where a vessel is badly cast ashore through the fury of the elements. Hence it may be clearly seen that the jettisoning of the Missouri's cargo could not possibly come under the head of either particular, or general average, and the ship must pay for what she wantonly destroys.

HENNEPIN CANAL.

Captain William S. Marshall, United State engineer at Chicago, in speaking about the proposed Hennepin canal, says that he regards the whole question as a bad investment, (to dig a channel, canal, or sewer, twenty-two feet deep, for vessels that could not get down the Illinois or Mississippi rivers drawing more than five feet,) he states that eleven million dollars have been spent in work on the Mississippi without raising the water an inch, and there is not enough money in the national treasury to give a channel to float lake vessels to the Gulf of Mexico; even if there were enough water lake vessels would not run down the rivers, for they are not built for that sort of navigation. The scheme of floating grain in unbroken bulk from Duluth to the gulf, as contemplated by the advocates of the deep water canals, Captain Marshall regards as entirely chimerical, speaking as an engineer from the standpoint of navigation.

We have repeatedly advocated these views in the columns of the MARINE RECORD and can see no occasion to alter our opinions. Next in order to the Detroit bridge scheme comes this Hennepin canal project; as sure as the one would be detrimental to navigation so would the other, and if it was considered necessary to lower the lake level, just such a plan as the Hennepin canal would in all probability be adopted.

A WASHINGTON dispatch says that "Congressman Farquhar intends to make a serious effort to get through this congress his bill granting a subsidy of 30 cents per ton to American vessels engaged in the foreign trade." Such a bounty system is certainly preferable to special subsidy grants to a few lines selected to carry the mails. But does Major Farquhar overlook the claims of the shipbuilders and shipowners of the great lakes? Is it fair play to take money from the people's pocket and give it to vessels running from the ports of Florida or Louisiana to Cuba or Central America and to withhold it from vessels running from Buffalo, Cleveland, Duluth or Chicago to Canadian ports?

Our foreign commerce for the last fiscal year (imports and exports of merchandise) aggregated in value $1,419,911,621, showing an increase over that of 1887 of $11,228,704 in the value of exports, and an increase of $31,637,346 in that of imports.

LAKE CARRIERS' ASSOCIATION

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS AND PROMOTE THEIR GENERAL WELFARE.

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MARINE RECORD—OFFICAL PAPER.

FORE AND AFT.

The death of Captain Robert Caswell, of Ludington, is reported. He was a well known mariner, and the owner of several tugs at that port.

Shipments of ore from the Vermillion range for the week ending May 4, were 22,496 tons. Last year at that date no ore had been shipped.

The big steamer Onoko has carried as high as 164,000 bushels of oats, 107,000 bushels of corn, and over 103,000 bushels of wheat in a single cargo.

The Canadian steamer St. Magnus, which was fined $1,000 last November for failing to report at Sault ste. Marie, has had the fine mitigated to $100.

A contract to supply the Richelieu & Ontario navigation company with 18,000 tons of coal has been awarded to the Cumberland coal and railway company.

A Chicago advice claims that the Clyde-built steamer Rosedale will have her amidship section placed in position next winter and will go into the trans-atlantic service.

One of the large mills of the Jackson lumber company at Lockport caught fire at eleven o'clock Monday night and was totally destroyed. Loss about $60,000; insurance $40,000.

Captain Paul of Kingston has commenced work on shoals with the government dredge. Some of the timber of the old steamer St. Lawrence sunk over fifty years ago has been raised.

Ashtabula is getting a long start upon Cleveland in ore receipts since the opening of navigation. Hurry the opening of the old channel from the river-bed into the outer harbor.

The steambarge Cormorant, bound down, when just below Sand Beach, broke her crank pin. She wat picked up and towed to this port by the Yakima. The Cormorant will be repaired at Port Huron.

The suit of Thomas Sheridan for $10,000 against the owners of the schooner C. A. King for injuries sustained last fall was remanded for another hearing on the motion of plaintiff to amend his declaration.

The new steamship Topeka of Milwaukee has a hydraulic steering gear which has been in use on the Ohio and Mississippi rivers for several years past, but is now introduced on the lakes for the first time.

It is reported that the inter-state commerce commission's discussion in regard to through lake and rail freight has made freights very much steadier at Chicago. These rates cannot be changed inside of five days, and so they hold unchanged.

The Rochester Transportation is the name of a company organized for the shipment of coal between Charlotte, Toronto and other lake ports. The company has purchased the tug John Martin, of Ogdensburg, and the schooners Morey, Boody and Swallow, of Chicago. Charlotte will be the shipping point.

The contractors for the new lock on the Cornwall canal at Dickinson's Landing, Messrs. Delorimier Bros., left with a complete complement of derricks and material for the work, which will begin on Monday. The lock and surrounding work to be done will occupy some 75 men a considerable part of the season.

Advices from Washburn say that both the Australasia and George are now afloat. The George was released at Michigan island Thursday night. They are reported in fairly good condition, although Captain Rardon telegraphed the Chicago insurance companies that the cost of releasing and repairing the Australasia might reach $25,000. Both boats will probably be brought down the lakes for repairs.

The Canadian government has reimposed harbor dues at Goderich on freight coming into and going from that port, and Mr. L. N. Doucy, harbor master, has been reappointed wharfinger. This action has been taken owing to the town not carrying out their agreement to keep the wharf and commercial docks in repair, through a misunderstanding between the government and the town as to the agreement, and the town officials have neglected taking the proper steps to have the matter adjusted, hence the present imposition of dues.

[CONTINUED FROM PAGE 1.]

The schooner Cascade, which was damaged by the Josephine, and for which damage $1,000 was paid by the owners of the latter, is undergoing repairs at Miller Brothers' shipyard and receiving a coat of red paint. She is to be the lightship at the end of the outer breakwater, having been chosen by the government engineer for that service at $300 per month.

After a long and hard fight to maintain lake freights, vessel men have succumbed and rates have dropped off ¼ of a cent, or to a basis of 2 cents on corn to Buffalo. The prospect for the future does not give much hope that the drop will have much effect in increasing business. Rates are not so much the question now as the supply of corn. With but 300 or 400 cars a day coming in there is certain to be constantly more vessel room on the market than shippers can take, and a downward tendency of lake freights is probable. As shippers have no idea that the receipts of corn will be increased until after the rush of spring work on the farms is over they are preparing to take it easy for a time. The through lake and rail lines have as yet given no notice of any reduction in their tariffs, although the through rates on corn to Baltimore dropped yesterday to 7 cents and to Philadelphia to 7¼c by the lines ignoring the interstate commerce law.

WILLIAMS.

BUFFALO, N. Y.

D. L. Crandall, manager of Saginaw river steamboat line, writes that the Trout wheel furnished the steamer Lucille, is a bang up good one and want a spare wheel of the same kind.

The steamer Minnie M. reports an increase of speed of one mile per hour with the new Trout wheel put on.

The steambarge Martini, with lumber for Tonawanda, went on Horseshoe reef at the mouth of Niagara river Monday morning. She was lightered off, and is leaking, but her siphons keep her free.

The steambarge Nako, with lumber for Tonawanda, arrived this afternoon on her first trip. She must lighter before she goes down the river.

The schooner Houghton unloaded 23,500 bushels of corn and took on 700 tons of coal in less than four hours.

Thomas Ryan has sold his tug E. D, Beach, which came from Philadelphia, to John Owen and Henry Beck of this port.

It appears that it was the North Wind which arrived with the first wheat from Duluth direct. The Eber Ward came in later on the same day.

George Hodgson, a fireman on the propeller Conemaugh, was drowned at Erie on Sunday night while trying to get on board. He leaves a family in Brooklyn.

The propellers North Wind, Northern Light, and Northern Queen of the Northern line were all here together on Monday. The latter comes down with 2,070 tons of ore, her first load. The Northern Light had wheat and the North Wind wheat and corn. The Northern Wave was here Tuesday evening with wheat and flour, and the Northern King with ore. The line is a splendid one, and the boats are as handsome as they are serviceable. They will probably all go out light if the coal-handlers' strike continues.

This end of the Erie canal was opened at midnight last Thursday. The channel down to Utica was reported in navigable condition. Between Utica and Little Falls the canal opened on Saturday. East of Little Falls it was understood to be in order. About 160 boats had been loaded with grain up to Sunday night, and the forwarding company had cleared about 150 of them.

The tug Ash of Maytham's line has a contract for towing stone scows from Medina to Buffalo. She takes three in a tow and makes a round trip in two days.

The new propeller John M. Nicol of Ward's line arrived on Saturday on her maiden trip, bringing 75,000 bushels of corn from Chicago. She is now loading for Lake Superior, part of her cargo being mining machinery. She is built similar to the Moran and the Ward of that line, but is considerably larger and better finished, so that she stands at the head of this line.

The schooners Page and Foster did not wait for the Edwards tow but left early Monday morning in tow of a river tug.

Captain Thomas Maytham has gone to Medina, O., being called there by the illness of his father.

The Lake Carriers' Association has published a pamphlet from its able address to the board of United States engineers, which is sitting in Detroit, on the question of a bridge across Detroit river. The address takes the ground that the true solution of this question is by means of a tunnel.

The Eber Ward brought in the first whea of the season, direct from Duluth. She had 24,000 bushels. Captain Stenton reported that parting of her wheel chain was the cause of the Ward's running into the barge Dashing Wave in the Sault river.

One steampump keeps the schooner Northwest free. She is in fair shape, considering the time she has been on the reef.

The schooner Y. M. C. A., ashore on Saunders Point, was pulled off Sunday by the tug Monarch.

The people who solicit patronage from the lake vessels that call here are so numerous and so persistent that they are making it very pleasant for the captains. Tugmen say they are on board a boat about as soon as it touches the dock and give the poor skipper no peace. It is expected that the more enterprising scalpers will take to hiring tugs and going out a few miles in order to sell their wares. They tell quite a story of two of the profession who were making for the same boat that lay up the creek somewhere. One had a wagon and passed the other, who was making the trip afoot. He refused to give his rival a ride, till he had taken the order he was after, and then, on his return trip, he very graciously offered to take the footman in. But the latter didn't fancy help at that stage of the game, and declined without thanks.

The Nipigon and barge Melbourne, from Lake Ontario, load coal here for Milwaukee at the going rate.

That remarkable trip of the Owego to Chicago in 58 hours has attracted much attention from vessel men. It is learned that she had only 81 tons of freight, and drew 14 feet aft. Her wheel being 15 feet in diameter, her engineer expected that she would not make a good showing. To the head of Lake Erie she used only four of her six boilers, thence to Sand Beach five were used, and thence to Chicago the whole six. The run from Mackinaw to Chicago, 333 miles, was made in 19¾ hours, an average of fully 16¾ miles per hour. The Union line officials believe she can make the trip in 50 hours if crowded. That would be an average of 18 miles an hour. The Chemung's machinery has also been overhauled, and big work is expected from her.

It is stated that Thomas Ryan will at once rebuild at Charlotte the propeller Lake Ontario, bought by him as a wreck.

CHEBOYGAN, MICH.

On the night of April 29th, ult., Louis Loucks, aged 23, was lost overboard in Lake Erie from the schooner Aloha, in tow of the barge Alpena, bound for Tonawanda. The accident occurred in midlake abreast of Dunkirk, N. Y. The parents of the unfortunate young man take this method of calling the attention of vessel men, life saving crews and others to keep a sharp lookout for the body, and if same be found, to at once telegraph his father, J. W. Loucks, Cheboygan, Michigan, who will pay a liberal reward for its recovery. Deceased at the time of the accident wore a doubled-breasted, blue chinchilla coat, dark pants, Scotch cap and laced shoes. Height about 5 feet 7 inches; weight about 155 pounds; brown hair, clipped close; hazel eyes; smooth face; no marks on body, except small scar on upper forehead. Might have had a printer's composing rule in his pocket.

Newspapers to whom this notice is sent, are earnestly requested to publish the above conspicuously, with the request for other lake papers to copy same, for which they will have the heartfelt thanks of his grief-stricken parents.

BAY CITY, MICH.

The new steambarge John Plankinton launched a few days ago, is owned by the Egan-Fitzgerald-Armour syndicate. Her length is 280 feet, beam 40½ feet, hold 23 feet, and her custom house measurement 1,461 tons. Her frames are steel strapped and corded. Her engine, fore-and-aft compound, is 28 and 52 by 42 inches, and was built by H. G. Trout of Buffalo. She will carry two steel boilers of three-fourths inch plate, each 14 by 9½ feet, to be allowed 130 pounds, and inclosed in an iron house. She has the inevitable Providence Windlass and capstan.

The plant for building iron vessels at Wheeler's shipyard will be ready for operation August 1.

DULUTH, MINN.

Captain Jules Durage, assistant government engineer, has gone to Ashland to take charge of the government harbor work. He was accompanied by Hugh Steel, the contractor for building the breakwater. The work calls for a breakwater 4,800 feet long. This will be the extent of the present season's work. The appropriation made by congress will be sufficient to extend the work next year 2,000 feet further or $22,000 will remain unexpended. The plans contemplate a breakwater 10,000 feet long and to complete the work will require at least $100,000. Captain Durage will be stationed at Ashland during the season. The work will be commenced in ten days.

Yocum's tug Rambler, built at a cost of $55,000, was successfully launched at Dututh Tuesday afternoon.

Rains have loosened the various log jams in the upper country and liberated a great many hung up drives.

MACKINAW CITY, MICH.

The Dean Richmond with a cargo of 80,000 bushels of oats, from Chicago for Port Huron, ran on Grey's reef at 11 o'clock Sunday night. She is on very hard. Her deck load, 12,000 bushels, was jettisoned but was not sufficient to float her. Her bow to the forward gangway is on solid rock, while her stern and port side is in deep water.

After thirteen hours' pulling, the Leviathan got the Dean Richmond off Tuesday. About 25,000 bushels of her grain was jettisoned. She is not leaking and is apparently uninjured. The hull and cargo of the Dean Richmond are insured in Crosby and McDonald's agencies, the former for $45,000, and the latter 84,500 bushels of oats for $23,500.

SAND BEACH, MICH.

Special to the Marine Record.

During the month of April 123 steamers and sail craft entered the harbor of refuge for shelter, which beats all previous records of the month of April.

Last winter Levi Brown built a fishing tug at this place 52 feet keel, 12 feet beam and 5 feet deep, propelled by an 11 by 11½ engine. He will run 150 nets during the fishing season.

The schooner George C. Finney, coal laden, sprung a leak last night and sunk near White Rock. She will probably be raised.

The steambarge Cleveland, with three consorts, bound up Tuesday April 30, broke down off Port Sanilac, and brought her barges to anchor, went back to Port Huron for repairs, but finding both dry docks occupied had to go to Detroit to go in the dock. Repairs were made and she returned and picked up her tow Sunday morning, May 5th. T.

ALPENA, MICH.

J. A. Widner, of Alpena, has fitted a small scow with steam power for loading posts and railway ties out of the river on to vessels. One end of an elevator is hoisted above the rail of the vessel. The other end extends a short distance below the surface of the water. An endless chain runs around the elevator, parallel to each other. On the chains are projections about four feet apart. The pieces of cedar are floated sideways against the endless chains, and the projections pick up the cedar and carry it to the vessel. The steam hoister carries a tie from the water to the deck of the vessel in nine seconds, and is able to put on board thirty-five pieces per minute.

The Spencer, bound up, went ashore at North point Sunday night. Her consort ran into her stern, smashing a large hole above her lower deck. The Spencer was released and brought here. She is now repairing.

PORT DALHOUSIE, ONT.

Steamer Norseman arrived last night from Port Hope and went on Muir's dry dock. Propeller Canada arrived from Hamilton to-night to go on dock for slight repairs The steambarge Glengarry is expected here for repairs. Steambarge Erin came off the dock and is getting her engine fitted up.

MUSKEGON, MICH.

A new line of boats will be started within the next ten days between Muskegon and Gladstone. Ten boats will make two trips per week to start with. They will connect at Gladstone with St. Paul, Minneapolis & Soo Railway.

ERIE, PA.

John Courser, a surfman of the life station, was seriously, possibly fatally injured Saturday. He was exercising with a 25-pound shot, which fell on him. He is unconscious.

MARQUETTE, MICH.

Lake shipments of iron ore for the season up to May 1 footed up 254,562 gross tons. At this time last season no ore had gone forward. The shipments for the past week have been quite heavy, aggregating 133,763 tons from the ports of Marquette, Escanaba and Ashland. The season opens exceedingly well and the prospect is that mines will send out more ore this year than they did in 1888 when their output was about 1,000,000 tons in excess of their product for many preceding years.

SANDUSKY, OHIO.

The schooner S. B. Pomeroy, consort of the propeller Caldwell, ran on Starve island reef Sunday night. She is loaded with lumber. The tug Buffalo has gone to her relief and took off a portion of her cargo.

ESCANABA, MICH.

The wrecking expedition which has been working at the schooner Northwest for some days past has succeeded in getting her off and is taking her into port.

MANITOWOC, WIS.

A new steam barge has been completed at Hanson & Scove's ship yards, Manitowoc. Her dimensions are 165 feet over all, 150 feet keel, 11 feet hold, and 31 feet beam. Her engine is a high pressure, 24 by 26. She has been built for Truman & Cooper of Manitowoc at a cost of $35,000. She will be named the Francis Hinton.

SAULT STE. MARIE, MICH.

The largest grain cargo that ever passed through Welland canal was taken down by the Algonquin, and comprised 72,500 bushels of corn. The tolls paid on vessel and cargo amounted to $418,98.

Vessel passages here and tonnage report for April: Steamers, 191; sails, 66; rafts and unregistered craft, 43; total, 300; total registered tonnage, 189,487; total freight tonnage, 119,622; number of passengers, 245; total number of passages, 300; total number of lockages, 266.

Frank Perry has just purchased and it is on its way here, a 12 inch "cataract" centrifugal pump, which, with boilers and entire outfit, cost $5,000. Undoubtedly this addition makes Mr. Perry's wrecking plant one of the very best on the chain of lakes and by far the best in these parts. His new pump will handle sand, hard coal or grain, as well as water and has a capacity of from 6,000 to 7,500 gallons of water a minute. Mr. Prery intends to pump up and lay in a big supply of lake building sand which he will carry in stock at his coal dock.

The new lock will be beyond all question the finest in the world. Its walls will be straight, so that vessels can enter alongside instead of the steamer entering first as now. This will save a great deal of time, the gates being the full width of the lock. There will be two solid walls of the heaviest kind of masonry a quarter of a mile long and forty-four feet wide, or equal to a wall half a mile long, forty-four feet high, and proportionately wide at the bottom. The lock is planned to the limit of the lake carriers, for twenty feet will always be the limit in draught of lake carriers because of Lake St. Clair.

PORT HURON, MICH.

Special to the Marine Record.

The steambarge Kasoto, bound up, when abreast of the Indian reserve, broke one of her wheel chains and went aground. She was released by the tug Kittie Haight.

The tug Castle arrived with a large raft for Mr. Howard on Monday.

Lynn, the marine reporter, has received a new 14-inch steam pump from the Westinghouse engine company of Boston; he also has a complete wrecking outfit.

The steambarge Groh is at Dunford & Alverson's drydock receiving new decks, stanchions, covering board, railing and other repairs.

Fitzgerald's drydock iron works are repairing the engines of the tugs John Neis and Cal. Davis.

The schooner Aurora has finished her repairs at Sarnia and is ready for sea.

The propeller Colorado has finished her repairs at the Wolverine drydock. She will run between this port and Duluth this season.

A sailor named John Mosson, residence Port Dalhousie, fell overboard from the barge Enterprise Tuesday on Lake Huron and was drowned.

The steamship Hudson, bound down Tuesday, and when abreast of the Wolverine drydock her steam steerer became foul, and she run into Campfield & Co's. coal dock about thirty feet, and about fifty tons of coal went into the river. ISIS.

FRANKFORT, MICH.

Special to the Marine Record

Steambarge R. A. Seymour, Captain J. D. Smoke, tried to weather last Thursday's gale by hanging on to Aral pier, in Platte bay, twenty miles north of Frankfort, where she was loading timber when the gale arose. A bar outside preventing her from leaving; all her chains and hawsers were out, but the tremendous seas dashing against her proved too heavy a strain, and they parted. Seeing that stranding was inevitable, captain ordered her sea-cocks opened and let her fill, and she sunk in 12 feet of water. The crew landed safely in the yawl. Tug Wheeler and steam pumps went to her rescue, and released her next day.

Schooner Guido dragged her anchor and went ashore on the 25th near Pierreport; released same day

Carter Bros., of Charlevoix, have purchased the tug L. Q. Ransom, and will take her to Sault ste. Marie to tow piles and scow for government contractor. BURMEISTER.

LAKE FREIGHTS.

CLEVELAND, May 8.—Coal loads are not numerous, but a few more engagements were reported yesterday than for several days. Ore carriers are in fair demand at unchanged rates. Escanaba to Ohio ports, 90c; Escanaba to Toledo, 90c; Marquette to Ohio ports, $1.10; coal, Buffalo to Chicago, 45c; Buffalo to Racine, 50c; Cleveland to Ludington, 50c; Sandusky to the Sault, 50c; Cleveland to the Sault, 50c.

CHICAGO, May 8.—Vessel room was in good demand with offerings of ready tonnage fair. Buffalo rates are steady on the basis of 2¼c for wheat, 2c for corn, and 1½c for oats. Georgian Bay rates are quoted at 1¾c for corn and 1½c for oats. For corn to Kingston 3⅛c was paid.

BUFFALO, N. Y., May 8.—Good demand for coal tonnage, rates firm and unchanged; to Chicago, 45c; to Milwaukee 45c; to Gladstone, 45c; to Racine, 50c; to East Saginaw, 40c.

Canal freights quiet, steady. Wheat 4c, corn 3⅝c, oats 2⅝c to New York.

SAGINAW, MICH., May 8.—Agents report plenty of loads offering, but low water is a prominent factor now, and light draught boats are in great demand. Rates—Bay City and Tonawanda to Buffalo, $1.75; to Ohio, $1.20, with 12½ extra from East Saginaw.

The total area under cultivation in corn wheat, rye, and oats in the United States in the year 1888, was 140,000,000 acres, or about 219,000 square miles. There are still 322,000,000 of public lands unsurveyed, much of which area is adapted to the growth of cereals; thus the unrealized crop possibilities of this country are yet enormous. This is a larger aggregate product of cereals than has ever been recorded, and is (as estimated by the agricultural department) about three times the production per capita of Europe. In the production of food supply the crop of potatoes was next in importance, and amounted to nearly 200,000,000 bushels.

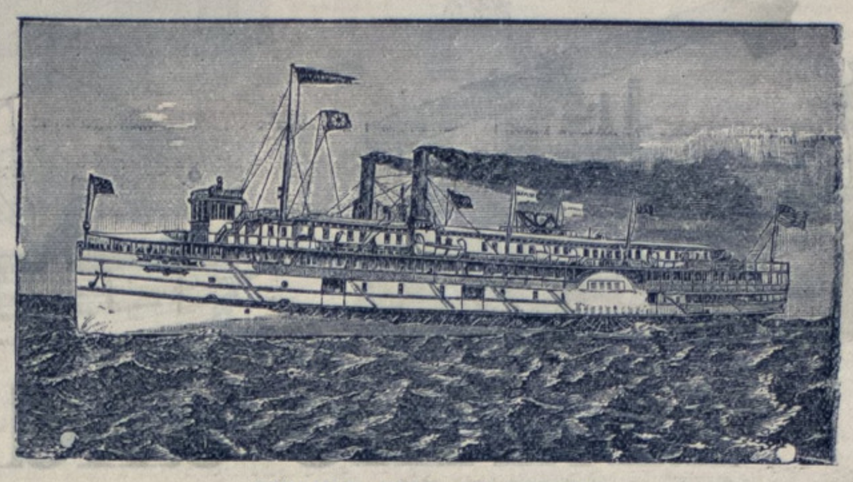
The house committee on fisheries has struck out of the fish bill all reference to whitefish. The committee has fixed the size of mesh in seines and gill nets at 4½ inches. The smallest marketable whitefish hereafter shall be 1½ pounds. The minimun weight and the size of the mesh are in conflict, and nets can be made any size.

Southeast signals were last night ordered hoisted on Lake Michigan and a severe storm was reported from the west.

MAIDEN TRIP OF THE STEAMER CITY OF DETROIT.

The splendid side wheel steamer, City of Detroit, of which so much has been said in the columns of this paper, left Detroit this morning on her maiden trip to Cleveland. This elegant passenger steamer actually surpasses all the expectations of her marine friends, and her first trip fully justifies the opinions formed by the members of the profession. A most select and highly appreciative passenger list was filled on her initial voyage, and crowds thronged the wharf at Detroit to bid farewell to the champion liner on the lakes.

Two hours after leaving Detroit, when the inhabitants of this floating palace were breathing the pure and cool air of Lake Erie, speechifying became the order of the



STEAMER CITY OF DETROIT.

day, and the mayor of Cleveland, George W. Gardner, Harvey D. Goulder, and Captain McLachlan gave vent in eloquent terms to the beauties of the elegant craft and the firm so ably represented by Mr. D. Carter, the efficient manager of the line.

After the elocutionary efforts a splendid collation was served in the spacious dining room, and one more connecting link was materially cemented between the City of the Straits and the Forest City. While floral wreaths decorated the grand saloon, and harmony and congratulations ruled the sway. Buried among a floral wreath, we unearthed the following document:

Captain D. McLachlan, Steamer City of Detroit:

Dear Captain:—The undersigned, a few of your Cleveland friends beg to present you this wreath as a slight token of our regard for you, as a courteous and genial gentleman, also as a most careful and skillful navigator. We hereby tender you our hearty congratulations on your taking command of this new and magnificent steamer, fully confident that you will prove equal to your great trust. signed, George W. Gardner, Percy W. Rice, Joseph Ingersol, Charles C. Ames, W. G. Short, Julius E. French, William J. Aikins, Louis A. Severence, Captain James Corrigin, El D. Sawyer L. M. Coe. H. E. Hill, George H. Johnson, Thomas A. Kelly, and other noted citizens too numerous to mention in so limited an article.

A more decided, positive and complete ovation could not possibly be tendered to any corporation having the disinterested advancement of twin cities at heart. General manager David Carter, Mr. McIntyre, Wm. Whitcomb, and other officials of the company were indefatigable in their efforts both socially, and professionally, and the entire maiden cruise passed off with the greatest eclat possible. The names of many ladies and gentlemen must necessarily be omitted, yet we may mention Mr. Fitz, A. Kirby and ladies, Mayor George Gardner and ladies, Captain Goodwin of the L. S. S., Mr. John Kist, late of city council CapE. Day, others as we have said before and m many delightfullyn numerous.

The veteran vessel owner of Detroit, E M. Peck, Mr. Owen of the Detroit dry dock, Mr. P. Smith of Cleveland, Captain Millen, Mr. Christie, Captain Coe, Mr. Fletcher the manufacturer of the engines, Mr. Wylie, and fully four hundred others enjoyed the most elegant and sumptious ride that ever was given to the citizens of Cleveland and Detroit. There is nothing superlative about the above statement as all who participated must candidly admit and the entire run was made in five hours forty minutes and forty-two seconds being a shorter passage by sixteen minutes than ever was run between Detroit and Cleveland, and bearing the best record of speed by just this time. In the future there is no doubt but she will do even better, when her machinery works free and easy.

The Detroit and Cleveland steam navigation company have introduced the speediest, most comfortable and expensive steamer there is in the passenger trade on the chain of lakes, and the citizens of both cities apparently recognize the honor conferred; judging, at least, from the warm welcome the steamer received on her appearance at Clevaland. A tug chartered by the representative vessel owners heralded the approach of the City of Detroit to this city.

We may mention that Captain D. McLachlan, of the old City of Detroit, will command the most elegant passenger steamer on the chain of lakes. Mr. McLachlan is the pilot. The chief engineer has been moved from her namesake. The chief steward, Mr. Thorne, and several of the other officers have simply been transferred. We will not trespass upon our readers' patience by duplicating dimensions of engines, or hull, as so much has already been said in the columns of this paper on that subject, suffice to say that, as an official marine paper, we gladly welcome the City of Detroit as a valuable acquisition to the tonnage of the great lakes.

Several tugs went out in the lake to meet, salute, and welcome this new and fine teamer, among which was the James Amadeus, on board of which was the Lisle gun of the life saving station, and the Thomas Maytham, Captain J. F. Brown, all bearing citizens of Cleveland, who welcomed the advent of the new City of Detroit with much enthusiasm. All things worked together for good with the exception that the manning of the L'sle gun became too enthusiastic, and becoming heated, Mr. John Everleigh, who was swabbing, became careless and Mr. Everleigh had three of his fingers shot away. Mr. W. Goodwin and Mr. L. Kist also had their fingers powder scorched. The wounded will soon recover, and long may the City of Detroit prosper.

Few people out of the lake trade are aware of the size of it. They might quite generally discredit the statement that the hard coal shipped out of Buffalo alone paid the vessels about $2,000,000 last season, but such is the fact. Besides, coal freights are net, which most freights are not. The vessel pays nothing for handling its black cargo.

EUREKA SPRINGS.

A FINE NEW HOTEL AND BATH HOUSES READY FOR THE COMING SEASON.

The Eureka Springs at Saegertown, Pa., 1,200 feet above sea level, now attracts thousands of visitors annually, and it is a matter for congratulation that a mammoth new hotel, replete with every modern convenience and luxury, has been provided for the coming season. As a summer resort Eureka Springs has few equals, while the curative properties of its springs are now recognized by the leading physicians of the country.

Every feature of the new hotel is admirable, none more so than its kitchen, 28 by 40 feet in size. The entire outfit of this model kitchen is from a widely known Cleveland house, Messrs. F. & H. Born, of No. 128 Superior street. Among the leading features are the fourteen hole range, ten hole steam cooker, two and a half foot broiler, 3 by 5 foot pastry oven, eight foot steam carving table, etc., each one complete to the most minute detail. This firm numbers among its patrons many of the leading hotels and public institutions in the country, among them the Beebe house, Elyria, O.; Metropolitan hotel, Elyria, O.; National hotel, Elyria, O; St. Charles hotel, Norwalk, O.; Gibson house, Crestline, O.; the Jefferson, Toledo, O.; Home hotel, Pittsburg, Pa.; New Park hotel, Warren, O.; Stockwell house, Painesville, O.; Yellow Springs hotel, Yellow Springs, O.; Tod house, Youngstown, O.; Central hotel, Alliance, O.; American house, Medina, O; Farrell house, Lorain, O.; Porter house, Lorain, O.; Pratt's hotel, Tiffin, O.; Shawhan house, Tiffin, O.; Grand Central, Columbus, O.; Tubbs house, Newark, O.; Erie county infirmary, Sandusky, O.; Belmont county infirmary, Belmont, O.; Alliance orphan asylum; Ursuline convent, Nottingham, O.; Oberlin college, Oberlin, O.; Central hotel, Galion, O.; Delmonico restaurant, Youngstown, O. The following are numbered among their Cleveland references: Hollenden hotel, American house, the Lincoln, Cleveland city hospital, St. Alexis hospital, City infirmary, Home of the aged Israelites, Jewish orphan asylum, Cleveland asylum for the insane, Cleveland cooking school, Rockwell house, Udall house, Livingstone, Philadelphia dairy and cafe, DeKlyn & Co., restaurant; Richards & McKean, restaurant; Thomas Larter, restaurant; R. Thomas, restaurant; Saddle Rock, restaurant; New Johnson house, New England house, New Wright house, Lake Shore house, Franklin house, Cataract hotel, Chairty hospital. In addition to the above list are the following steamers: Aurora, American Eagle, Forest City, Missoula, Onthwaite, P. Smith, Spokane, Bay City, Dredge 3, Kalkaska, Nipigon, Raleigh, Sitka, C. Tower, jr., Yakima, New City of Detroit, Peerless and many others.

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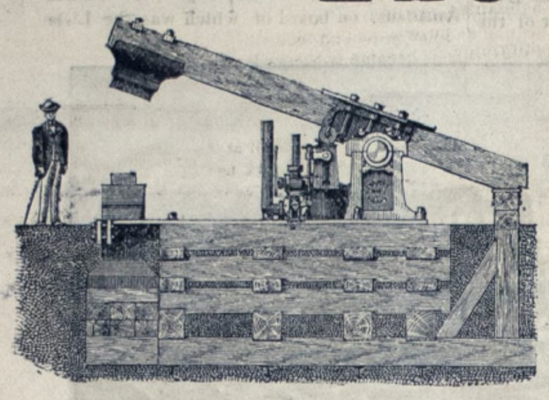

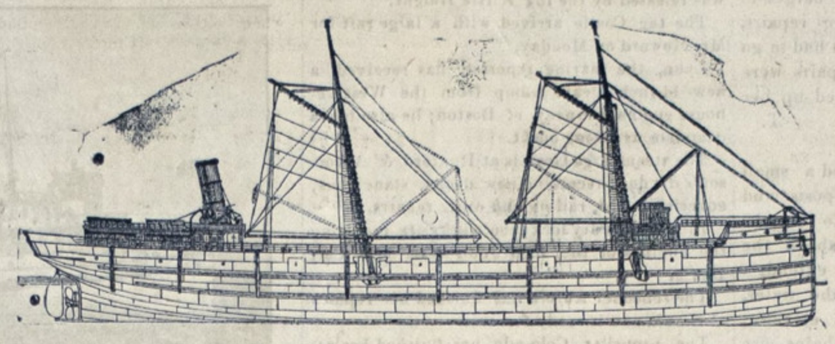

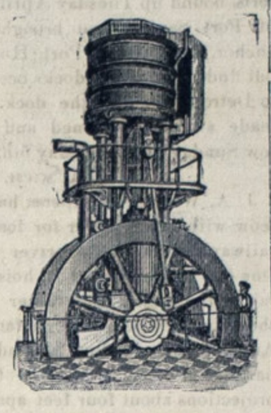

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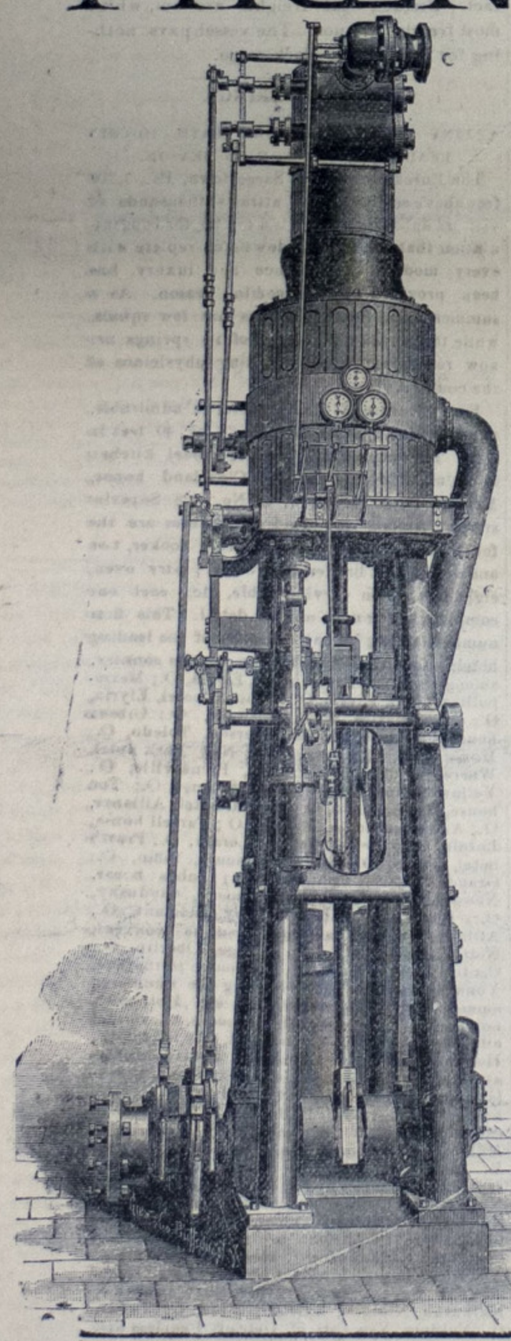

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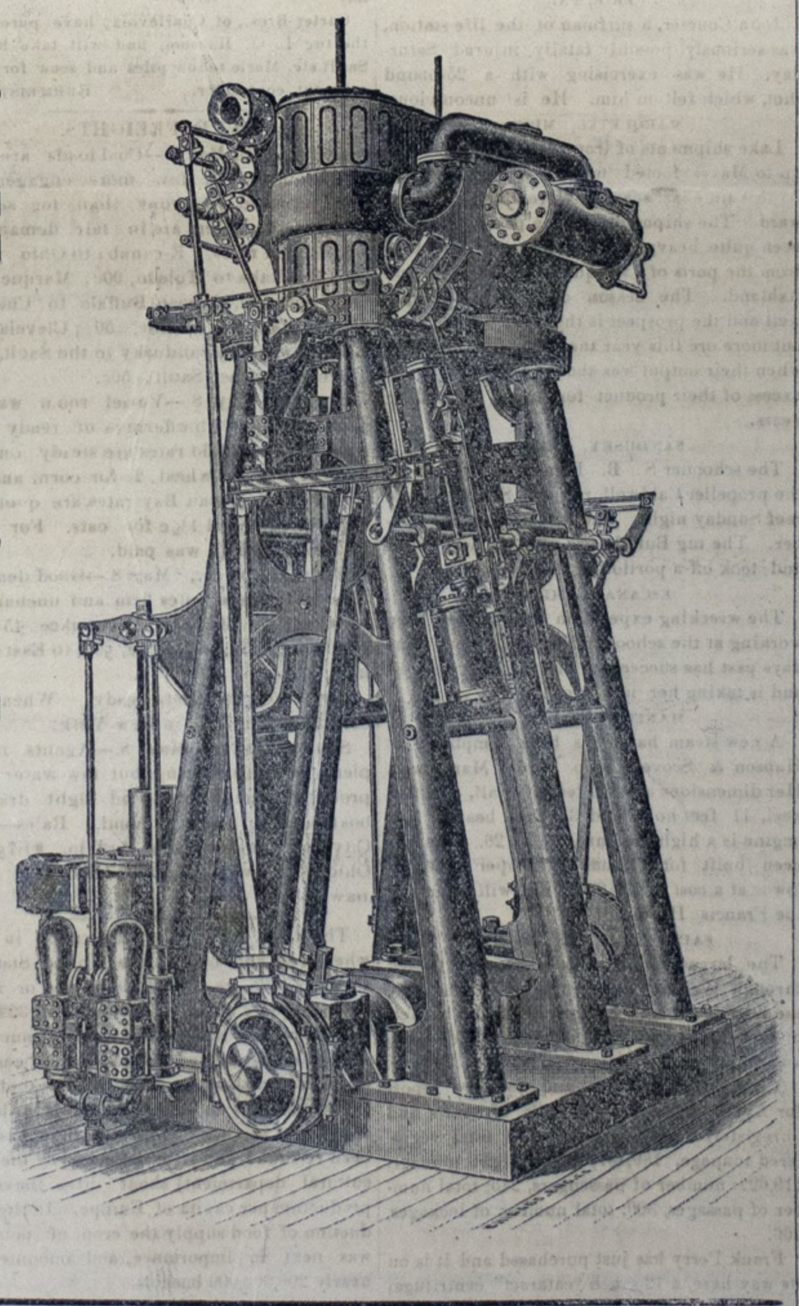

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STEAM BARGE PASSAIC, and four consorts. Capacity, 3,300 tons coal or 2,400,000 feet timber. Boat now laid up at Buffalo. For terms and price, inquire of J. M. JONES, 52 Griswold St., or C. C. BLODGETT, 242 Woodbridge St., Detroit, Michigan.

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HARBOR TUG for sale. Engine 18x20, boiler 5 feet 6 inches by 11 feet, and allowed 100 pounds of steam, and is A2, valued at $5,500 by Lloyd's register, but the owner will take $5,000 cash. For further particulars inquire at 113 Franklin avenue, Cleveland, O.

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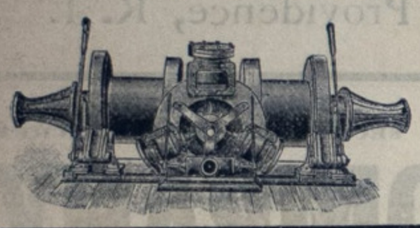

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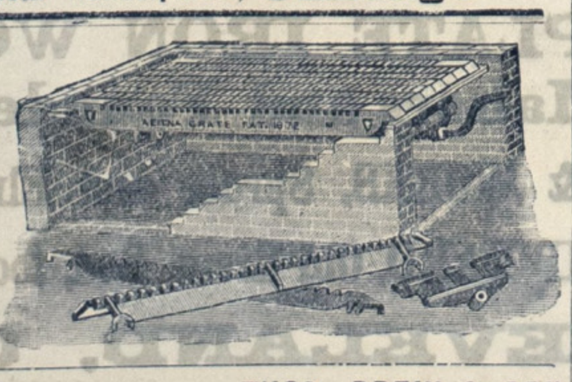

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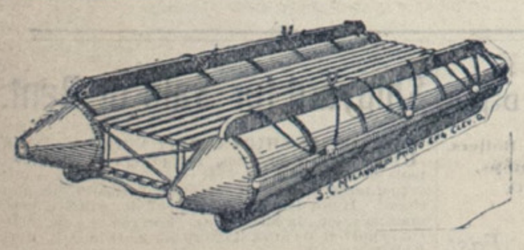

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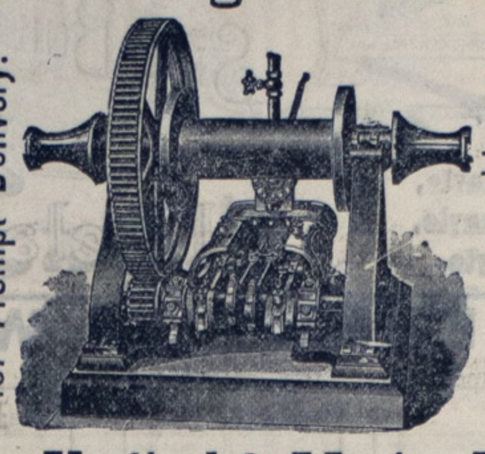

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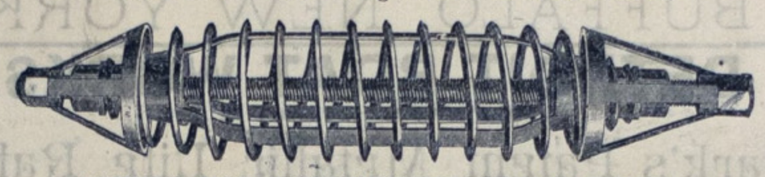

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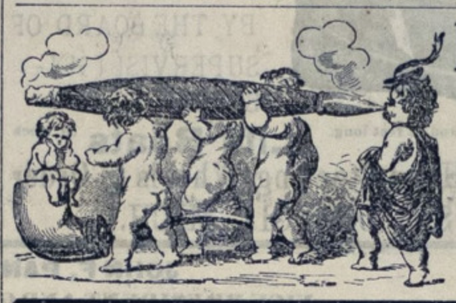

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SIMPSON'S PATENT IMPROVED TIMBER DRY DOCK

NO. 35 BROADWAY, NEW YORK CITY.

THE STANDARD SELF-DETACHING DAVIT FALL HOOK,

FOR THE LOWERING OF LIFE AND YAWL BOATS.

By referring to the accompanying illustrations owners and masters of vessels cannot fail to appreciate the great advantage of this device, which at once fills a long felt want Safety, speed, and its being non-intricate, make it a veritable boon to mariners.

These hooks have been thoroughly tested with entire satisfaction, and may be seen in practical use on steamers Samuel Mather, Progress, Lackawanna, schooners Golden Age, Wadena, Fayette Brown, Thomas Quayle, Warner, Annabel Wilson, Ahira Cobb, H. A. Kent, Henry A. Hoag, Galatia, Alva Bradley, Ogarita, Hattie Wells, S. A. Irish, Sumatra, Montgomery and John O'Neil.

We ask attention of our readers to the Standard self-detaching davit fall hook as advertised in the columns of this paper, and we are pleased to note that the master of the Sumatra, who has just been supplied with a set of these hooks, writes to the inventors as follows:

PORT HURON, April 19.

Mr. G. W. Learman, Cleveland, Ohio.

Dear Sir.—I am happy to inform you that the patent self detaching hooks you furnished the Sumatra this spring are all, and more than you represent them to be; they worked very successfully with the vessel going at the rate of seven miles an hour. I shall recommend your hooks to any and every one of my acquaintances in the vessel line. Yours, etc. (Signed) W. E. RUSSEL, master of the Sumatra.

Sold by ship chandlers. Address

GEORGE LEARMAN,

24 Seneca st., Cleveland, Ohio.

J. C. GOSS.

Sail Maker and Rigger,

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SEND FOR ILLUSTRATED CATALOGUE OF BUNTING, FLAGS, AWNINGS, ETC.

A. J. MORSE & SON.

DIVING APPARATUS

140 CONGRESS ST. BOSTON.

[CONTINUED FROM PAGE 3.]

displays in working it out in practice, as well as for his readiness to place before all who are interested in shipping the results of his own practical experience. In the paper on stockless anchors, Mr. Sivewright describes the various types which have come into use in the last few years, and we may say at once that while he is an enthusiastic advocate of the stockless anchor, he discusses very impartially the respective merits of its various forms. Mr. Sivewright attributes the failure of Hawkins' stockless anchor to deficiency of tripping power in the head. This is, indeed, a most important requirement, because without it the anchor is liable to drag along the bottom without gripping at all. In Parkes', Baxter's, and Hall's stockless anchors the tripping power is at the centre of the head, and in the latter there is a special feature, the crosshead introduced with a view to prevent the anchor leaving the shank if the through pin connecting the shank and crown is broken. One stockless anchor, Smith's, has the ripping power at the head of the flukes on each side instead of at the centre, one, Tyzack's, has an arrangement by which there is really a third fluke at the middle of the head. Doubtless the recent extensive adoption of stockless anchors is to some extent due to the various improved types by which the difficulty as to tripping has been more or less overcome, but it is certain that a great inducement to shipowners has been the arrangement by which the anchor is drawn up into the hawse pipes, and thus so much time and labor saved by dispensing with catting and fishing. This plan was first adopted by Messrs. Scott and Riddell, in 1877. In speaking of it, Mr. Sivewright says: "By adopting this system of housing anchors all cranes, davits, and other gear are dispensed with, thus saving the renewals of blocks, rope falls, etc., attendant upon the old plan; it also gives a clear forecastle head, which is of great advantage whilst working the ship in and out of port. The method of housing is simplicity itself. All that is required, when commencing to hoist the anchor is to see that the windlass cableholder brakes are screwed in and the pawls down. It is not necessary for any of the officers to be standing by the stem-head to superintend this work, for when the head of the anchor is hauled close home to the side of the vessel it acts as a brake, stopping the windlass without doing any damage. The time occupied in dropping these anchors and hoisting into position again is only a few minutes, and two of the crew only are required to carry out this operation." All this represents great practical saving of labor and time. We have heard, it is true, of more than one case where a stockless anchor being drawn up into the hawse pipe from a muddy bottom, so much mud was drawn up on the shank, that when it was desired to lower it again, it was found that it had stuck fast in the hawse pipe. With proper care, of course, this could be obviated; anyhow it would not be an insurmountable objection to the use of stockless anchors.

The important question of course is, does the stockless anchor do its work as an anchor better or as well as the anchor of the old type? The answer to this question is at present doubtful. One thing in favor of the more recent, as compared with older stockless anchors is their greater weight. Lloyd's now require an addition of 25 per cent. on the weight of a stockless anchor in lieu of the stock, and Mr. Sivewright, in his proposed new type of stockless anchor, largely increases the weight at the top end in order to keep the shank in a more horizontal position, and thus secure a better grip. But the question yet remains, is there a better chance of good holding with two flukes and no stock, than with stocked anchors. The admiralty, as the result of trials, have decided against stockless anchors, the reason alleged being that if one fluke meets with worse holding ground than the other, it leaves the ground, and the anchor then gyrates and finally turns out with the flukes uppermost. It is also said that at the admiralty trials it was found that when the ground was hard the anchor skidded along the ground and was useless.

On the other hand, many shipmasters have reported most favorably upon the holding power of stockless anchors. The question is really one for practical experience to determine, and as stockless anchors have been so largely adopted within the last year or two, many of our readers must already have valuable experience on the subject, which we should be glad to find room for in these pages. The advantage of the anchor whose shank can be stowed in the hawse pipe are so great as regards time and labor, that we feel sure some type of anchor will ultimately be found capable of being thus worked, and also having good holding power. We saw a proposal very recently, not a patent, for an anchor with a shank forked towards the crown, and having only one arm and fluke, which could pass through the fork in the shank. There was also a stock, but it was at the crown. This anchor had only one holding point; it also had a stock to prevent its canting, and it could be hauled into the hawse pipe, although to take the forked shank, the hawse pipe would have to be somewhat larger.—London Nautical Magazine.

A dispatch from Detroit says: The United States steamer Dahlia, tender for lake Michigan, started up Monday morning on her buoy-setting trip. The United States steamer Warrington, tender for the Lake Huron and Lake Superior district, has also gone up. She will set the lake buoys on the up trip and th river buoys on her way back. The lightship has been set in place and the lightkeepers are all at their posts and the lamps lighted.

It is said to be not improbable that Canadian freight cars coming into the United States and running U. S. railroads will now have to pay the regular rate of duty at the ports of entry.

THE FILER & STOWELL CO.
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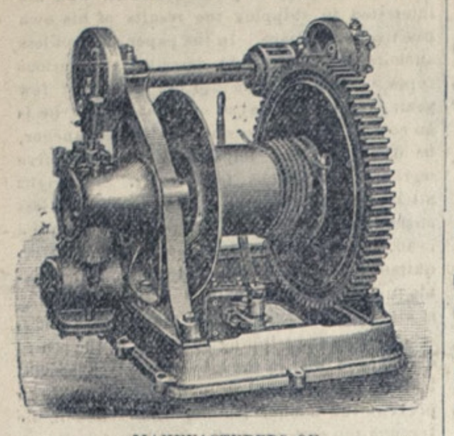

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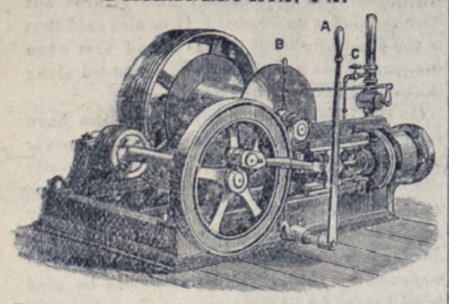

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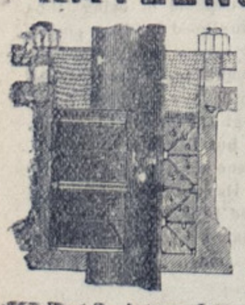

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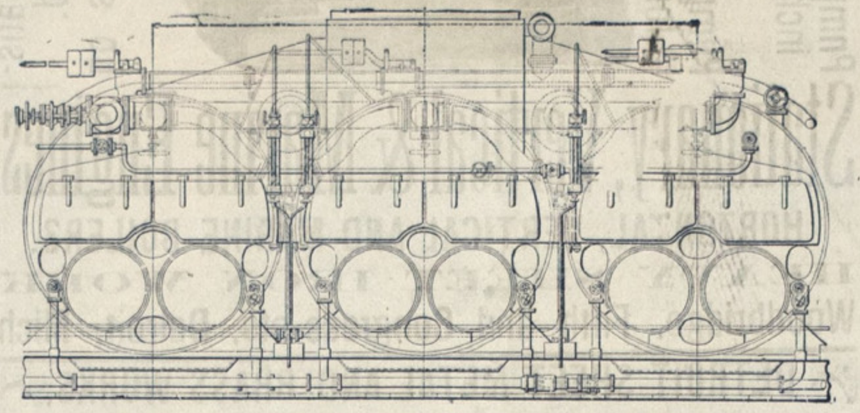

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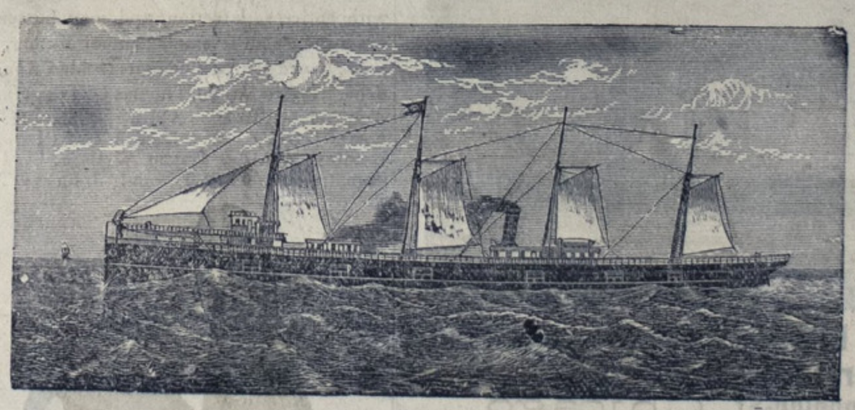

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